

IN THE SPECIFICATION:

1. *The Office Action states that the substitute specification filed 2-13-06 has not been entered as no marked up version has been sent.*

Therefore, to overcome that issue, an appropriately marked up version of the originally filed specification is being included with this mailing.

2. *Further, the disclosure was objected to because it was stated that "The specification does not clearly describe how the claimed invention works. Namely, how a 'new program is written', which is a phrase that is used throughout the specification.*

In order to clarify this issue, Applicants respectfully submit that the phrase 'new program is written' is commonplace in the industry and is known to mean that, just as it was stated in the Office Action, that the computer controlled machine is not actually 'writing a new program', but rather is taking data input to perform a 'pre-written program' to obtain a certain finished product. Support for this premise is included in the attached photocopies of portions of Chapter 1 of "Programming Fundamentals" from the book 6K Series Programmer's Guide published by 6K Series of New York, New York. Excerpts of the Guide are included for clarification relating to the Motion Planner Programming Environment to help program with speed and efficiency, where Wizards are utilized. Wizards are used for structuring programs and system setups.

The common phraseology for a new tool program for a desired tool is actually referring to a new user script where the user selects pre-defined scripts and places them in order with a graphical user interface (gui) to the specification of the tool/part print. The numeric values are entered through a template (the value increment parameter window) and a gui. The "Send Program" button transfers the data of the selected numeric values through a standard RS232 controller (ethernet transfer means) to the motion controller of the grinding wheel controller to follow the script.

Applicants submit that although these 'creation' operations are commonly referred to in the industry as 'new programs', they are actually creating new tool scripts. An example of a script file that is run by Applicants' computer controlled machine is shown in FIG. 4 of the originally filed drawings for a 'Roller On' script to indicate the roller on operation described in the originally filed specification. Also attached to this communication is a page of script for this 'Roller On' operation.

4. *In the Office Action, it is stated that "On Page 11, line 26 of the original specification is unclear. What does 'indicating' refer to? 'indicting' of what? What does 'having part repeats within millionths' mean?"*

Applicants wish to clarify what these statements mean. The term "indicating" is a common term in the precision tool grinding art and it always refers to the need to return a workpiece to an exact location, or an 'indication', in order to determine how precise the grinding operation ended up. In essence, a prior art machine operator would precision grind a part or workpiece, then he would remove it from the machine, 'indicate it' (i.e. measure, mark or whatever the appropriate indicating action is necessary in the case of his particular machine), take it over to an inspection station, and then return it to the machine for finishing. With the present invention, a great advantage is realized because no 'indicating' is necessary. Even parts or workpieces that need to be ground to a precision of millionths of an inch can be reproduced on a repeat basis without the need for 'indicating'. If any further clarification is necessary, please contact the attorney listed below.

IN THE CLAIMS:

12. (Amended) A method of operating a computer controlled grinding machine having a computer with a computer screen, a grinding wheel and a regulating roller to grind a workpiece using the grinding wheel for grinding the outer surface of a workpiece, comprising:

loading a workpiece into the grinding machine between the grinding wheel and the regulating roller;

selecting ~~a part profile icon~~ an icon that most closely resembles the profile of the part you would like to create from computer screen commands displayed on the computer screen;

setting ~~value increment~~ parameters inside at least one window displayed on the computer screen by inputting desired data entries into the computer corresponding to those parameter values; and

directing the computer to perform the grinding operation as input into the computer.

13. (Previously presented) The method of claim 12, further comprising a step of dressing the grinding wheel prior to the performance of the grinding operation.

14. (Previously presented) The method of claim 12, further comprising a step of dressing the regulating roller prior to the performance of the grinding operation.

REMARKS/ARGUMENTS

Pursuant to the requirement of 37 CFR 1.121(c), and as stated above, please substitute and replace all the claim sheets, with the above set of claims. The following claim rejections and objections were noted from the Office Action dated November 17, 2006 and pursuant to each paragraph, presented in the same order, arguments follow.

Claim Rejections – 35 USC § 112

3. *Claims 12-14 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regard as the invention.*

In response to this rejection, claim 12 was amended to more clearly define the invention, and therefore believes that the rejection has been overcome. The definition of "part profile icon" has been replaced with a word-for-word recitation from page 13 of the originally filed specification. The term "value increment" was deleted to overcome the other rejection. Applicants now submit that the claims are in allowable condition, and respectfully request an issuance.

Claim Rejections – 35 USC § 102

5. *Claims 12-14 were rejected under 35 U.S.C. 102(e) as being anticipated by Maack USPN 5,766,057.*

In response to this rejection, the method claims 12-14 now recited are deemed to be allowable over the Maack USPN 5,766,057 because there is no teaching, suggestion nor disclosure of an icon window where a shape of a desired resultant shape is to be selected from, nor has the data input window been disclosed taught, suggested nor disclosed by the cited prior art. Although Maack discloses a centerless grinding machine, the structural differences between it and the present invention go beyond the computer screens of the present invention that are not found on Maack. The grinding and dressing axes are separate and different in the Maack, which necessitates removal of the workpiece for checking, and re-positioning thereafter. The present invention has the SAME dressing and the grinding axis, so no movement is necessary. This means that the present invention can be reproducible to a more high precision accuracy. No indicating is necessary, which means that the extremely high precision grinding operation capable with the method of the present invention can be reproduced to within millionths of an inch on a regular basis.

For the reasons above, Applicants respectfully submit that claims 12-14 are now in condition for allowance, and request that the Examiner give such an allowance.

Applicants wish to thank the Examiner for her clear rejections/objections in the course of the examination, and hope, that by these Amendments, the subject matter of the present invention is now more clearly stated, such that a closer review of the present invention, in light of

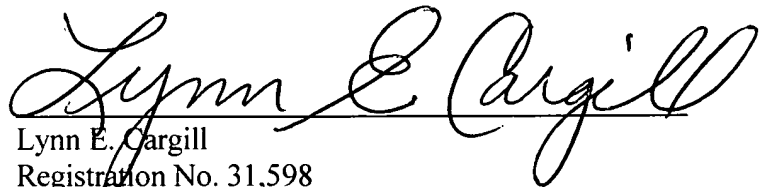
the amendments and arguments made here, will give solid support for an allowance. Consequently, Applicants request reconsideration in the instant Application and withdrawal of all grounds of rejection and objection in view of the amendments and the following discussion.

If the Examiner feels that the prosecution of this Application can be expedited by conversation, she is courteously requested to place a telephone call to Applicants' attorney at the number listed below.

In view of the foregoing, it is believed that the remaining claims now distinguish over the prior art and are allowable. For the reasons discussed above, it is believed that this Application is now in an allowable condition such that it is appropriate to hereby respectfully solicit its allowance.

Respectfully submitted,

STEVEN G. SMARSH, ET AL.
CARGILL & ASSOCIATES, P.L.L.C.

A handwritten signature in black ink, reading "Lynn E. Cargill". The signature is written in a cursive, flowing style. The first name "Lynn" is written in a large, elegant script. The middle initial "E." is smaller and more compact. The last name "Cargill" is written in a similar cursive style, with a long, sweeping tail that extends to the right.

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